

State of Wisconsin Department of Public Instruction

Elizabeth Burmaster, State Superintendent

****INTRODUCTORY ADDRESS****

State Superintendent Elizabeth Burmaster

Wisconsin Environmental Science Teacher Network

Melvin Laird Room, Dreyfus University Center, University of Wisconsin-Stevens Point August 19, 2008

Good morning and thank you for inviting me to this exciting environmental science teacher networking inaugural event. This is an historic event, and we hope the beginning of a tradition.

Thank you Randy for that kind introduction. Randy, thanks for your work as the director for the Environmental Education Center.

Thank you Wisconsin Environmental Education Board and the Environmental Education Foundation for all your great work. Thanks also to Pat Merinoc and Sunshine Buchholtz, environmental science network coordinator, and the entire conference committee for making this exciting event possible. So many worked so hard to bring us all together.

And it is great to share the stage with George Meyer, who continues his strong leadership in Wisconsin for our environment and natural resources.

I am honored to serve as your state superintendent.

We are here because we know how important environmental science education is for preparing our students for their and our future in our 21st century interconnected world. I know from the work of the Wisconsin Environmental Education Board and Wisconsin Women Forward for Environmental Education, that the number of environmental science courses in our high schools is growing, but that we need even greater advocacy and education policy to support the important work that you, as environmental science educators are doing.

Without a doubt, there are environmental challenges facing Wisconsin's students and their teachers that did not exist 20 years ago. Some of those new challenges include climate change, an ever diminishing water supply, newly identified invasive species of plants and animals, and habitat depletion. These are not just issues affecting us in Wisconsin; they are global issues.

Public education is the foundation of our American democracy. Democracy depends on an educated citizenry.

The National Science Foundation has repeatedly called for the creation of a scientifically informed citizenry and pointed out that this will require a systematic approach to environmental education grounded in a broad and deep research base. We must offer our students a compelling invitation to lifelong learning of their environment.

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In a similar way, the Environmental Protection Agency, articulates the need for an informed citizenry recognizing that "Environmental Education increases public awareness and knowledge about environmental issues or problems. In doing so, it provides the public with the necessary skills to make informed decisions and take responsible action."

To be good citizens, this generation of students must learn how scientific evidence is combined with social considerations and contrasts in evidence based decision-making.

Environmental science is powerful in the high school curriculum because it allows students to gain greater understandings about the contemporary disciplines of science, technology, engineering, and mathematics (STEM). In the last state budget, we won approval for STEM grants to support our educators and schools. As students are studying environmental science concepts, they are able to understand how the STEM disciplines are integrated.

For example, when students are conducting a local ecological study, they use mathematics to explain their data and findings, they use technology to describe the location of the study, they use science to understand their observations, and they use engineering concepts if they decide to improve the site.

Our high school students need rigorous coursework that allows them to gain the knowledge and skills to be critical thinkers, problem solvers, innovators, and effective communicators. Students must be prepared to be globally aware, civically engaged, and technologically proficient. Many high schools have a core curriculum for science that students perceive as being remote from their lives and concerns.

Education must be relevant to student's lives, the world must be a part of the classroom, and students must go out into the world to learn. Educators must create these opportunities for students to gain knowledge and competencies in authentic learning experiences.

Environmental science courses are excellent opportunities for students to engage in their own learning through rigorous and relevant content and application of knowledge. Students, who take these courses, leave the classroom with the 21st century skills being called for today. Through their explorations of global climatology, global economics, global health issues, and planetary life support systems, students become increasingly aware of the issues facing our world.

Students in environmental science classes learn how to be decision makers, informed voters, and are able to contribute productively to the workface of the future. They also learn to be good stewards of our natural resources and environment.

The very way young people perceive the future and how they can create the future through sustainable practices can be explored. This is powerful curriculum that develops a process of constant inquiry in your students. They are learning to ask the right questions.

As environmental science teachers, you play an important role in preparing our students for success in the 21st century. You are doing an outstanding job of providing your students with the opportunities to learn about environmental science and global studies. I know that in many of your high schools, environmental science exists because you lobbied for it and volunteered to teach it.

I know you spend many extra hours (and your own money) in the classroom preparing for your environmental science classes. Many of you also sponsor environmental science clubs after school, and you often play an important role when your students are engaged in their service-learning projects and activities. That is precisely the kind of relevancy we value in education. In environmental education, you do more and lead the way.

Now, our state must do more. In my budget, to be announced next month in the Capitol, I will call for funding a state education consultant for environmental education. For too many years, since funding was cut in the 1990s, we have been without a direct state-level position supporting environmental education.

This is the year for all of us to join together in advocacy for environmental education. Let your voices be heard for a state environmental education consultant and for more STEM grants.

So often our teachers are not recognized and thanked for their tireless efforts. I am here today to say *thank you* to each of you for making a difference for your students and for all that you do to prepare them for the world that awaits them after graduation.

I hope you enjoy your time here, and that you are able to meet new colleagues and to share ideas with each other. I also wish to thank the center for environmental education for making this event happen, and thank you again for the opportunity to be here today with you.

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Elizabeth Burmaster is the elected state superintendent of public instruction.

NOTE: A high-resolution photo of the state superintendent is available for download on the Department of Public Instruction "Media Contacts and Resources" webpage at http://dpi.wi.gov/eis/vm-media.html.